Job Cache

Job Cache is an optional feature that can be enabled for a TradeTek Serial Number. Shared Job Cache applies to shared job storage used by distributed members of an estimating team. Local Job Cache discussed at the end of this document applies to local job storage by an individual estimator.

Shared Job Cache is specifically designed for an organization that stores jobs on a NAS drive on the Internet or Local Area Network. It allows distributed TradeTek users quick access to a large numbers of job files.

Some organizations using TradeTek have managers, estimators and salespeople at scattered locations that need access to hundreds or even thousands of jobs. Job files are often stored on a NAS (Network Attached Storage) drive connected to TradeTek users through the internet.

NAS drives are available as a monthly service like iCloud, Google Drive, One Drive or DropBox or a one time purchase for a self managed drive connected to the Internet. Some companies prefer the lower long term cost and added security of owning the server on which their data is stored.

While storing jobs on a NAS drive is often the most practical solution for distributed users, navigating and locating a specific job is hundreds of times slower on a cloud based drive than on a local hard disk. Shared Job Cache solves this problem with two main capabilites. It provides a company wide job filtering and navigation screen and a massive performance boost when displaying job names in the Open Job dialog for NAS drives.

Job Cache is an enterprise level feature that can be enabled for a TradeTek Serial Number at $25/month per user similiar to a trade bundle. Job Cache is included at no cost with new TradeTek with Cloud subscriptions. Existing TradeTek with Cloud customers can request Job Cache be enabled for their account. Users storing jobs in TradeTek Cloud will not use Shared Job Cache, but can use Local Job Cache on each estimator's computer.

Shared Job Cache

When Shared Job Cache is enabled, TradeTek automatically maintains an active cache file for shared job folders. Base on Internet speed, navigating through a nested set of Year and nested Yard folders stored on a NAS drive can be very slow due to Internet communication with hundreds of files.

Presenting a screen of Job Names for a folder hold a couple hundred jobs may take several minutes without Shared Job Cache and 2 seconds when enabled. Rather than making hundreds of individual requests across the Internet and processing 10s of MBs of data, a single request returns all Job directory information for the company.

Shared Job Cache is typically setup once by a team leader and then automcatically maintained by TradeTek thereafter. TradeTek updates the cache as jobs are created, deleted, modified or moved by managers, estimators, salespeople or other TradeTek users involved in the construction estimating process.

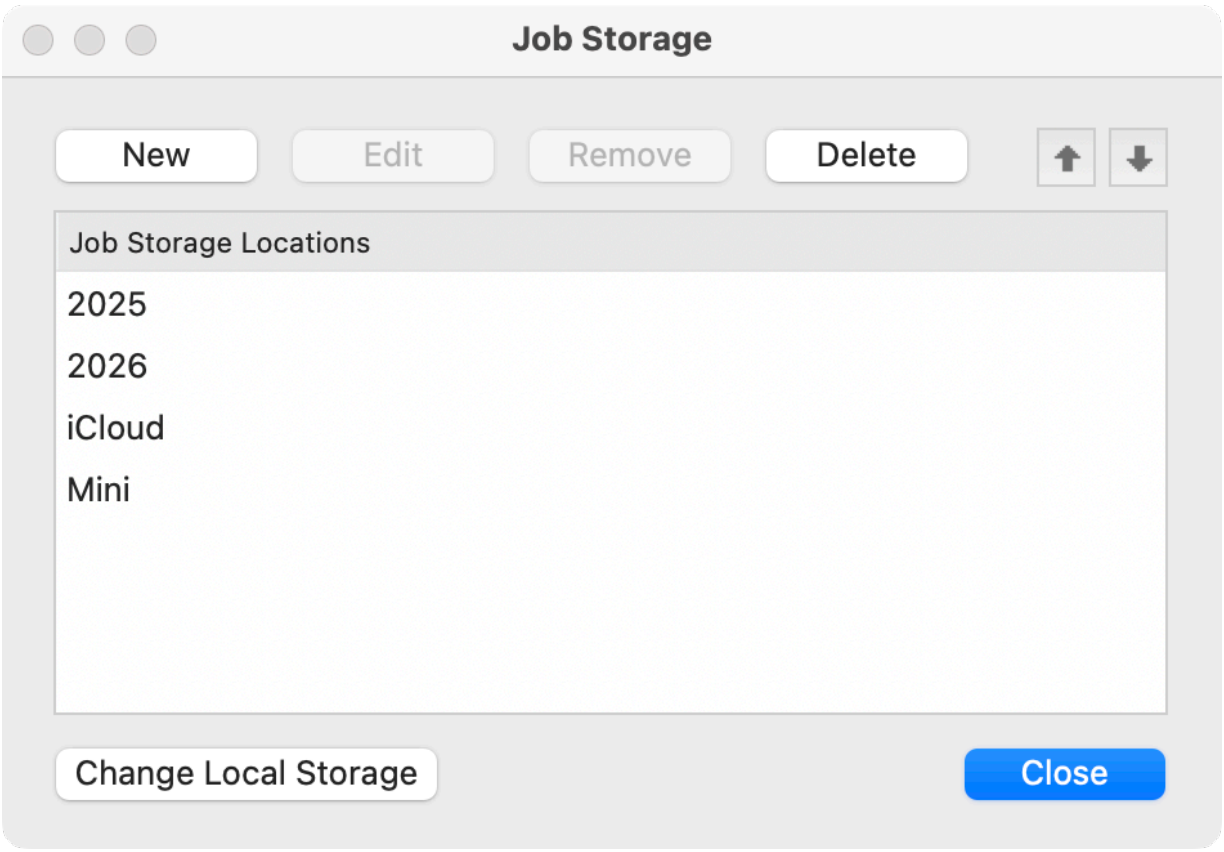
If Shared Job Cache is enabled for your Serial Number, click the **Job Cache** button in the Preferences dialog to present the Shared Job Cache Setup dialog. This setup data is either stored in the TradeTek Cloud or on a company designated shared drive. This data must also be accessible to all TradeTek team members. An organization may require Admin access to open the Shared Job Cache Setup dialog.

The Shared Job Cache Setup dialog is used by the team leader to designate which shared folders hold TradeTek jobs. It allows up to 8 job Property Names to be included in the cache. Building the cache the first time might take over an hour with thousands of jobs. In rare cases, users might directly copy job folders in and out of the NAS drives outside of TradeTek or change the cached job property list. In that situation, use the **Force Rebuild Cache** checkbox.

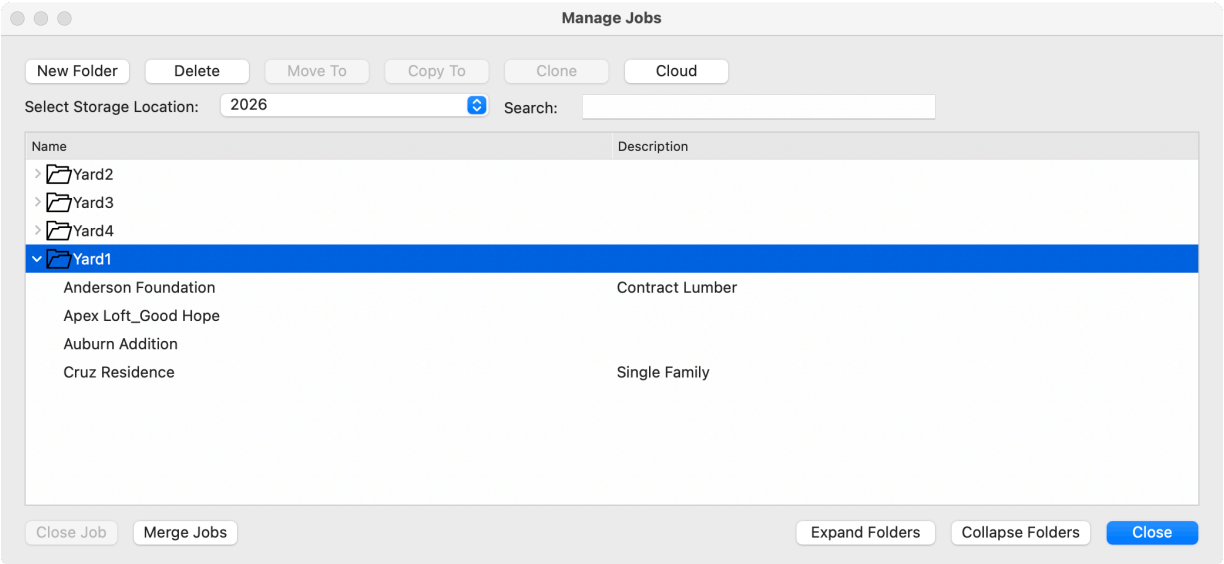
Job Folders

From the Home panel in TradeTek, the Job Storage and Manage Job dialogs are used to assign shared storage locations and organize those locations into folders. This storage structure is stored in the users Preferences folder. It is typically setup once and seldom changes. Although TradeTek users in a company may be at different physical locations, all users should start with the same Preferences so they share a consistent storage structure.

Storage locations are defined by clicking the **Storage** button on the Home panel to present the Job Storage dialog. Each storage location has a name and the primary file path to the top folder of that storage location.



A storage location can be divided into multiple folders by clicking the **Manage** button to present the Manage Jobs dialog. For example, a large lumber yard might have Job Storage locations named 2025, 2026, 2027, etc. Each of those locations might have a folder for each yard location such as Yard1, Yard2, Yard3, etc.

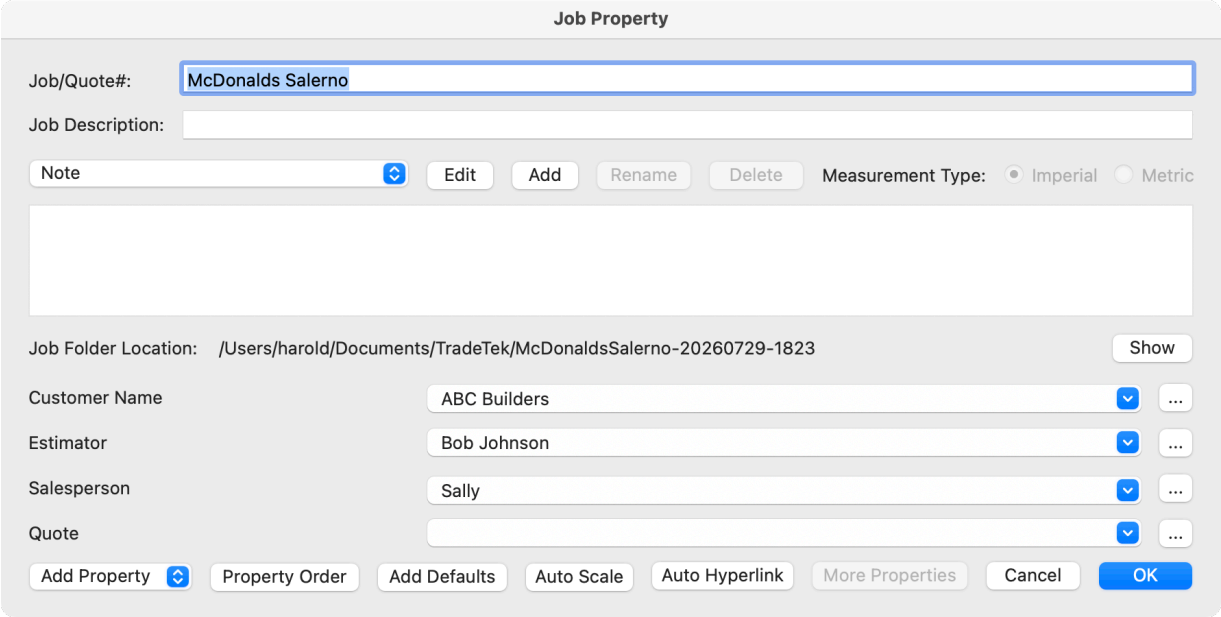


Job Properties

Jobs can hold Properties that might be useful by Estimators, Managers and Sales people to locate and organize jobs. Selected job properties can be automatically maintained by TradeTek in the live cache.

Useful job properties might include Customer, Estimator, Salesperson or Quote. To save time, add these properties to **Job Property** on the **Set Default Property** panel of the **Template** panel. All newly created jobs will include these properties. By convention, the estimator can fill in these property values when creating a new job.

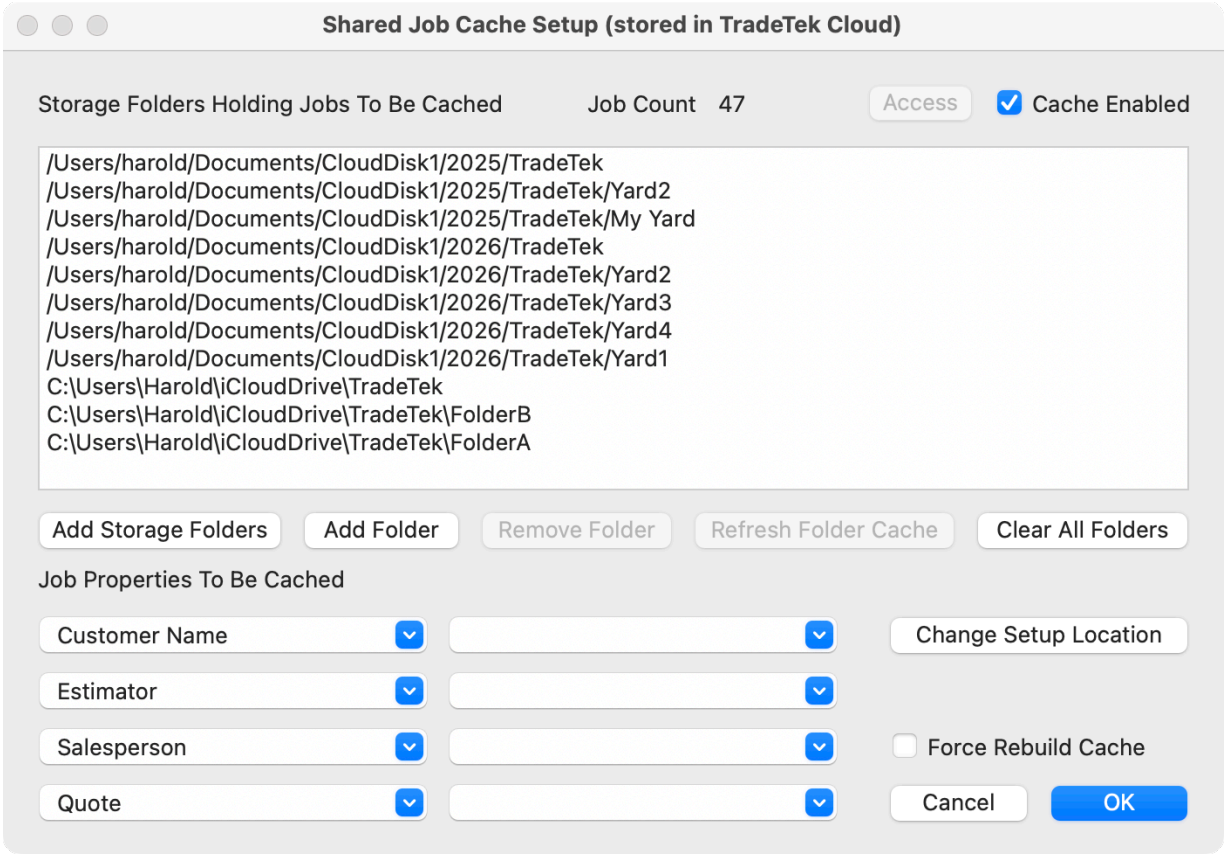
For existing jobs, click the **Add Defaults** button at the bottom of the Job Property dialog to add these new properties.



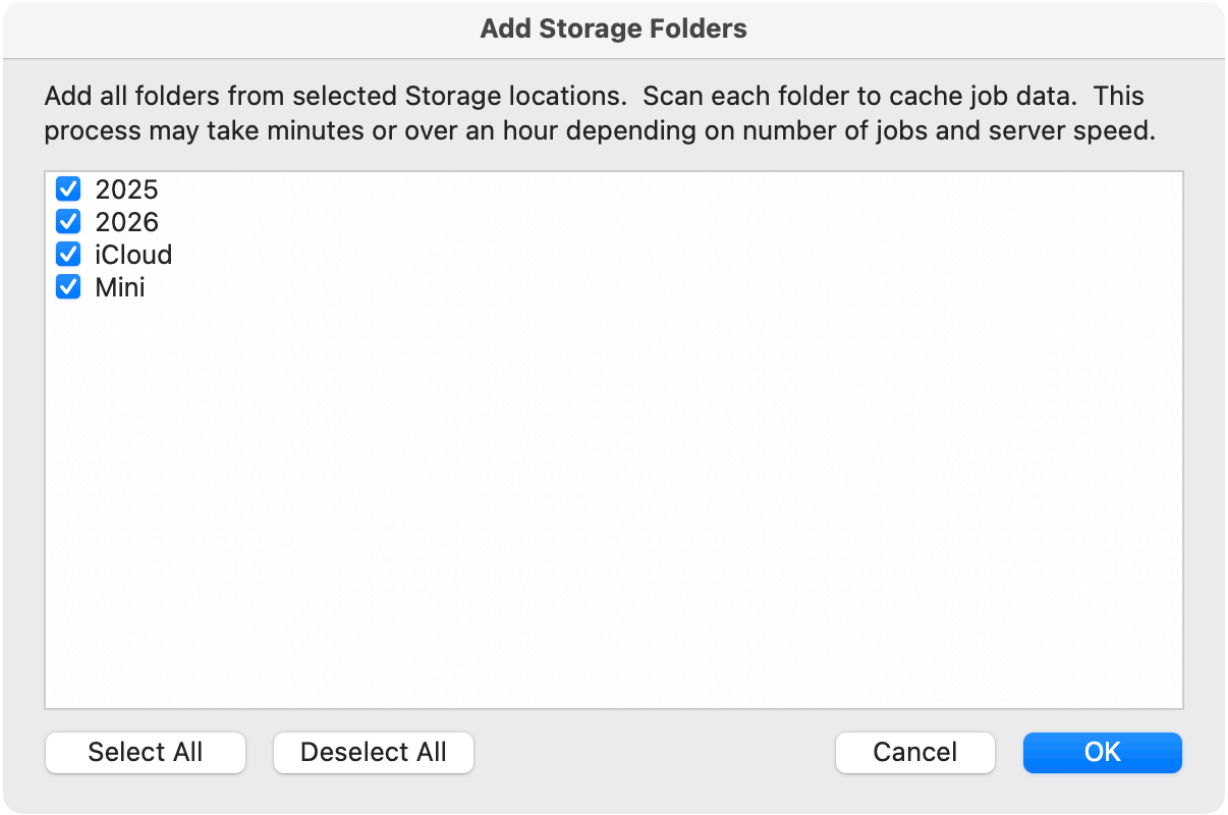
Setup Shared Job Cache

The team leader determines which storage folders are included in the Job Cache. A company may keep backup folders of current job folders that don't need to be included in the Shared Job Cache. Old archive folders may be stored for years, but are seldom accessed.

The **Job Cache** button in the Preferences dialog presents the Shared Job Cache Setup dialog. The team leader assigns the Storage Folders that hold your jobs and selects the Job properties to be included in the cache. The user can select Property names from the drop down menus otherwise type the exact case-sensitive Property names. Leave unneeded fields empty.

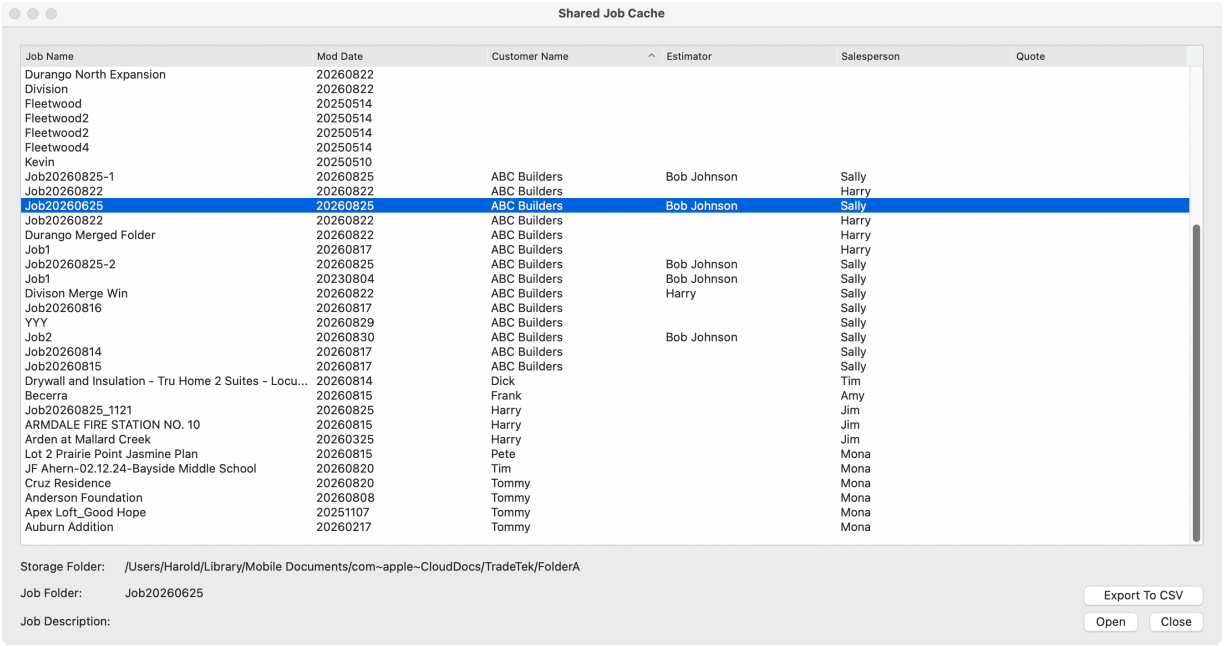


The team leader will typically just click the **Add Storage Folders** button, select all storage locations in the presented dialog and click **OK**. The Shared Job Cache Setup dialog has additional buttons to Add, Remove or Refresh individual folders, but those are seldom needed.



Shared Job Cache

When Job Cache is enabled, a **Shared Cache** button is visible at the top right corner of the Open Job dialog. It presents a dialog to instantly filter and locate jobs in the cache based on selected property values.



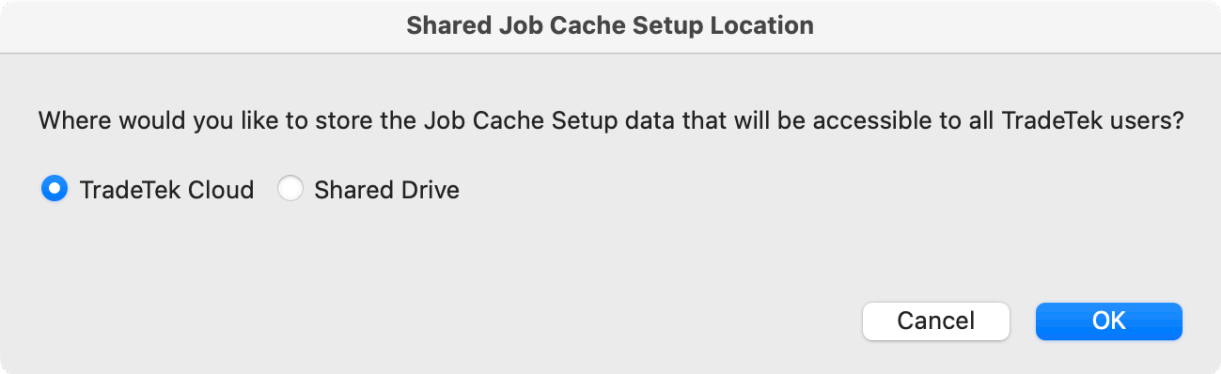
Each column name allows alphabetical sorting of values. The user can select any row and click **Open** (or double-click) to open that job. Click the **Export CSV** button to get a file of sorted data that can be viewed in Excel.

Shared Job Cache Location

When clicking on the **Job Cache** button in the Preferences dialog for the first time, TradeTek must assign a location for storing cache data and save that location in the user's preference data. The cache data is used internally by TradeTek. If the user has TradeTek Cloud, that location is automatically assigned to TradeTek Cloud.

If the user is not connected to a TradeTek Cloud account, the Job Cache Setup Location dialog is presented to allow the user to select an Internet storage location for storing the cache file.

All TradeTek users in the company share the same cache file and must have access to that location whenever they launch TradeTek. Estimators often do most of their work in Local storage and only connect to an external shared storage device when needed. A mixed environment of Mac and Windows users might require different access paths to a NAS device. In these situations, the **Trade Cloud** radio button is usually the best storage choice.



The **Change Setup Location** button in Shared Job Cache Setup dialog allows the user to change the location of the cache file.

Job Cache Performance

The performance boost when navigating and locating jobs will depend on how many jobs are in each folder. Other factors include whether a shared folder is on the local area network or the Internet and the Internet speed of your computer. Based on measured results, navigating and locating files should be 10x to 100x faster.

NAS Drive on Local Network:	10x faster
NAS Drive on Internet:	10x to 100x faster
Local USB Storage:	10x faster

Mixed Mac/Windows Environments

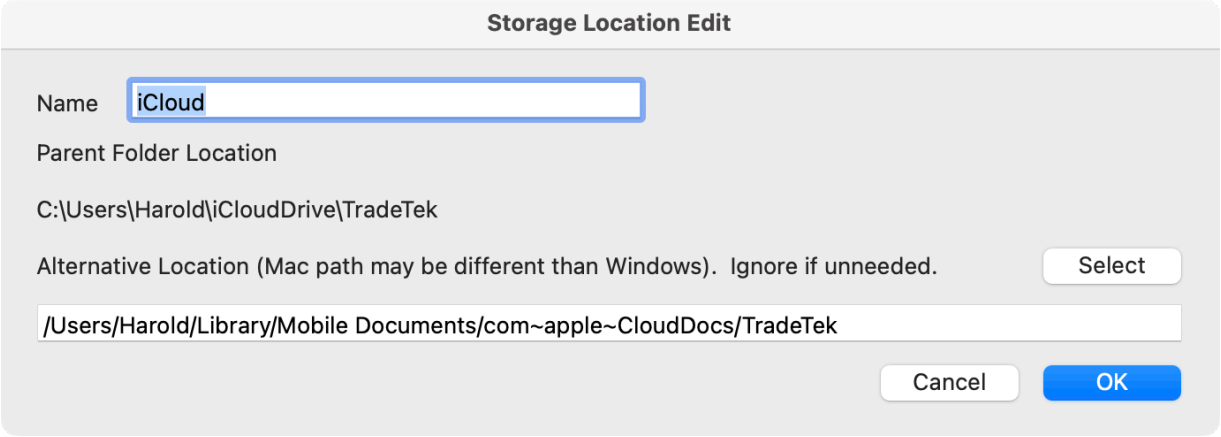
In most companies, all users are running on either Window or Mac. When assigning the access path to Storage locations, the same path can be used by all computers. The Job Storage data is stored in preferences that can be exported and imported by all TradeTek users.

In a mixed environment that contains both Mac and Windows computers, the Job Storage setup is somewhat more complicated since Mac computers often reference cloud storage locations different than Windows computers. TradeTek solves this issue by supporting an optional Alternative Location field.

In the example below, the company is storing their jobs in iCloud and then accessing those jobs from a mix of Mac and Windows computers. iCloud just looks like a hard drive from any Mac or Windows computer. In this example, the iCloud storage location was setup first from a Windows computer and you see a typically Windows file path in the Parent Folder Location. Later from a Mac, the Alternate Location field was set by clicking the **Select** button and choosing the iCloud drive.

TradeTek will automatically use the correct access path so all Mac and Windows users

can share the same TradeTek preferences.



Local Job Cache

The Shared Job Cache is typically setup by the team leader, shared by all TradeTek users on the team and applies to Network or Cloud based job storage. Local Job Cache is optionally setup and used by an individual estimator to optimize access to locally stored jobs. While they share similar concepts, Shared Job Cache and Local Job Cache are completely independent.

The **Local Cache** button on the Open Job dialog presents the Local Job Cache dialog. This dialog contains a Setup panel to control what is included in the cache and a View panel to locate jobs based on specific job property values. The Local Job Cache setup and cached data is stored on the estimator's local computer and is unaffected by Internet access.

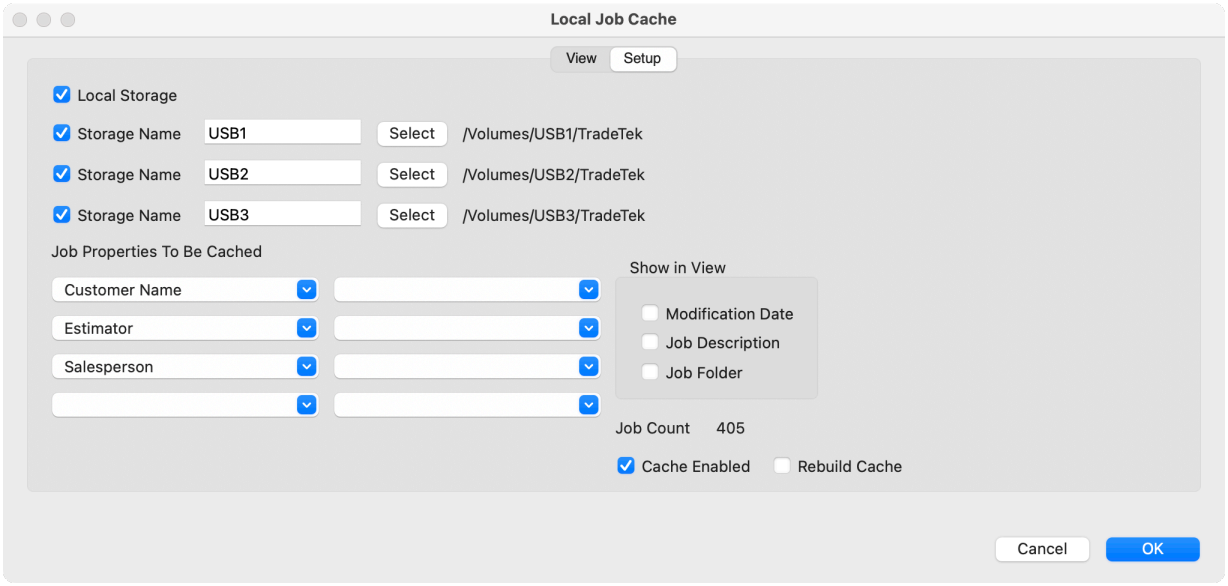
Local Job Cache provides several benefits. Although accessing jobs on a local drive is much faster than a cloud drive, a folder with a couple hundreds jobs might take several seconds to display in the Open Job dialog. When cache is enabled, access is nearly instantaneous. Local Job Cache allows an individual TradeTek user to supplement their environment with additional local storage locations.

Setup - Local Job Cache

Most TradeTek users have a fast solid state drive in their computer, but storage space may be limited. A large number of jobs can be stored on a USB or other external hard drive. The Setup panel of Local Job Cache allows the user to add additonal storage locations that show up in the Open Job dialog for that estimator.

To add additional storage locations, set the Storage Name checkbox, give it a name and click the **Select** button to locate the path to that location. When selecting the path

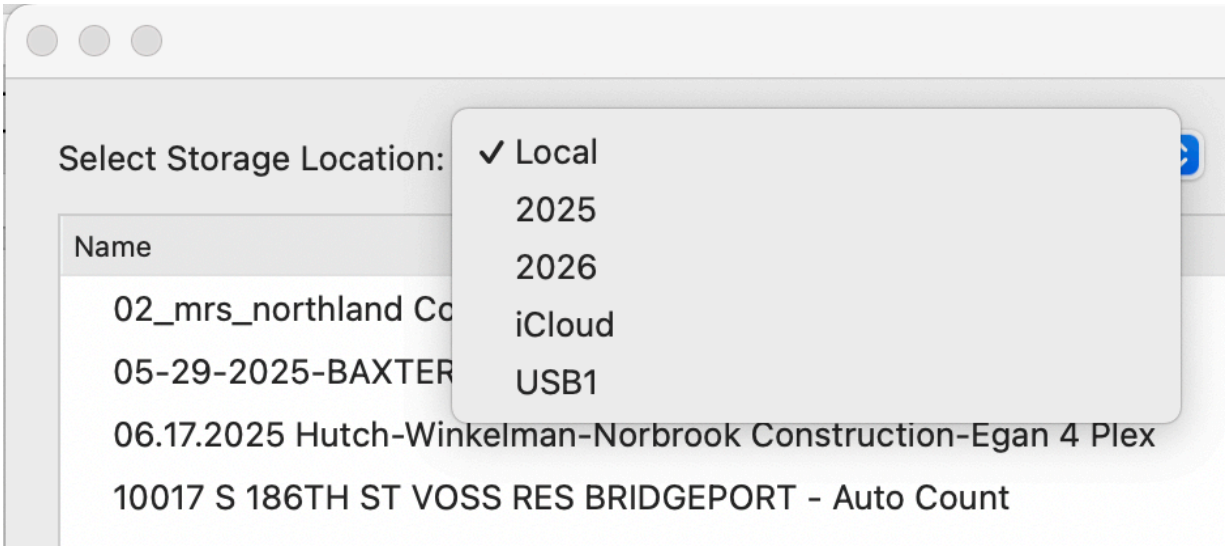
to the external drive, a folder named TradeTek is added if it does not already exist. By default, all TradeTek jobs are stored in this folder. To add nested folders within that location, refer to the Manage Jobs section below.



The Setup process is typically a one time event. When TradeTek is used to create, delete or modify jobs, the cache is automatically maintained.

Open Job - Local Job Cache

If the USB drive is present, it can be selected from the Open Job dialog. If the USB drive is not present, it will not appear on the drop down menu of storage locations.

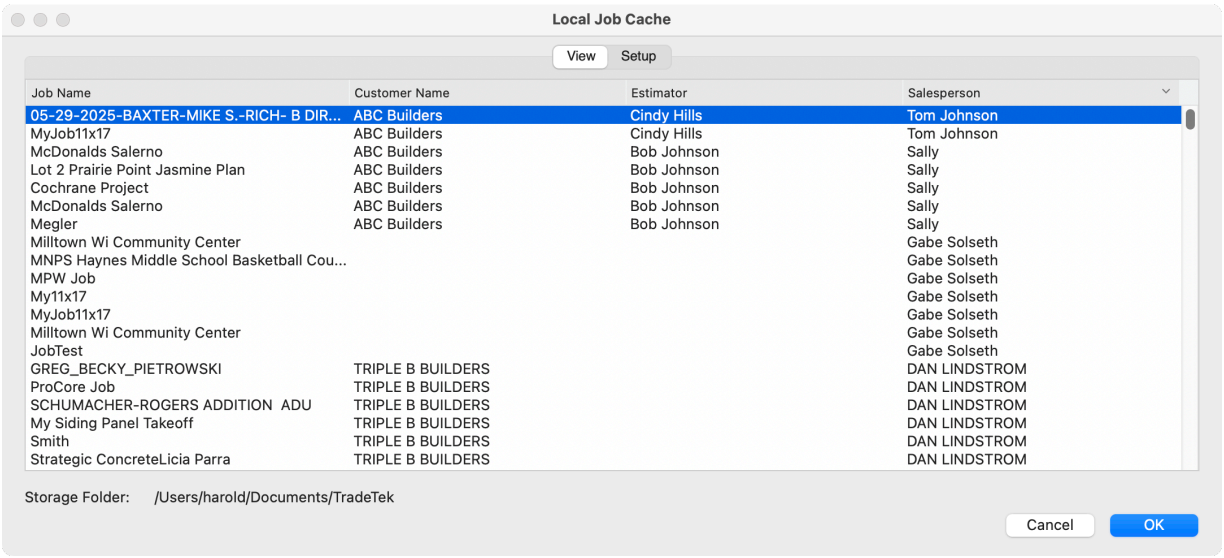


After starting a computer or inserting a USB drive with stored jobs, access time can be very slow (30 to 60 seconds) on first use. After using the USB drive for awhile, the

macOS or Windows computer will apply its own caching system to improve performance. If the drive holds hundreds of jobs, viewing the job list might still take several seconds. With Local Job Cache enabled, the Open Job dialog access can be instantaneous on first and every use.

View - Local Job Cache

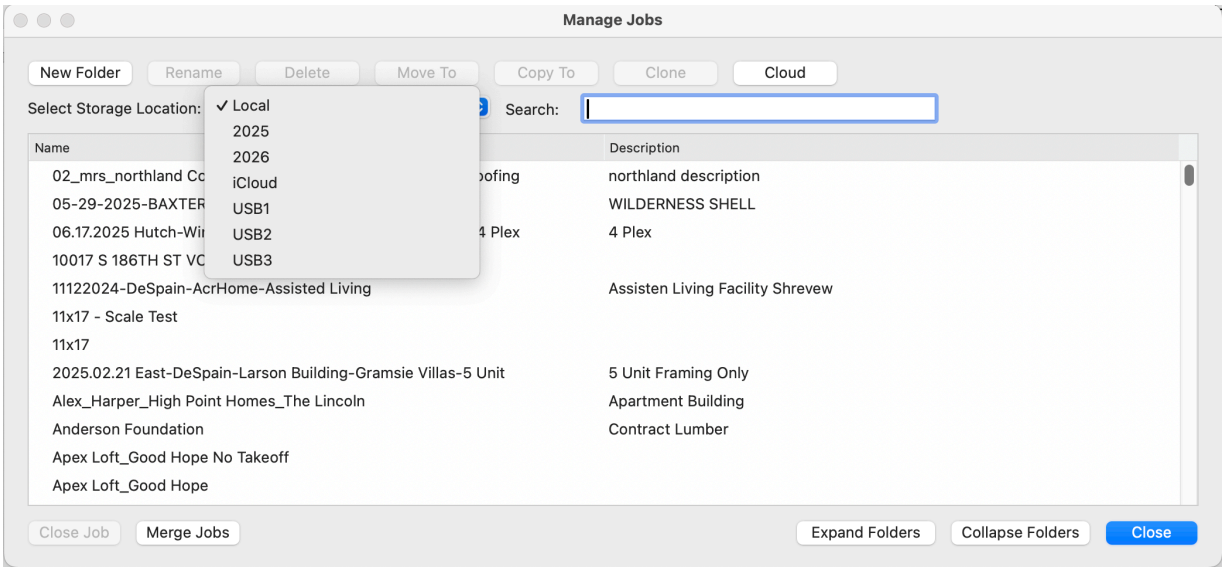
The View panel consists of a set of sortable columns based on options selected in the Setup panel. Click on a column name to sort values alphabetically in ascending or descending order. Double-click on a row to open that job.



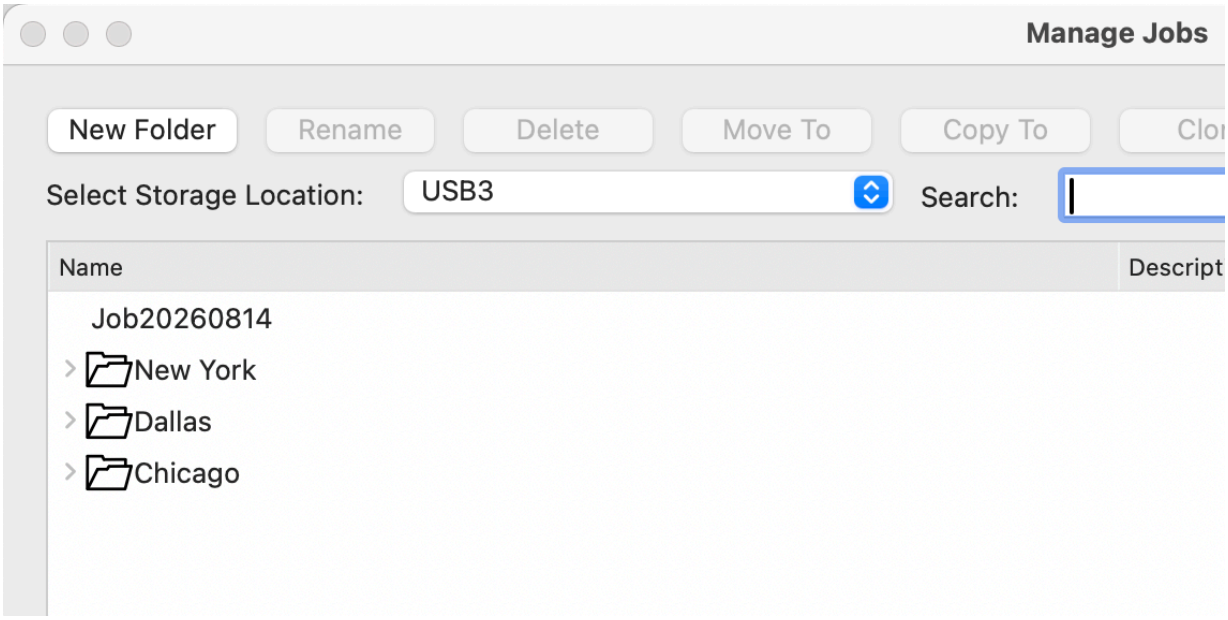
Manage Jobs - Local Job Cache

If additional local storage locations have been added in the Local Job Cache, TradeTek will seemlessly integrate those locations into the Manage Jobs dialog for that specific user. This will not affect what other users experience when using the Manage Jobs dialog.

In the example below, all users on your team will see Local, 2025, 2026 and iCloud. Local refers to jobs on the local computer. Locations 2025, 2026 and iCloud refer to shared locations on the Internet. USB1, USB2 and USB3 refer to local USB storage which is currently connected to your specific computer. If you unplug USB3, then present the Manage Jobs dialog again it will not be shown.



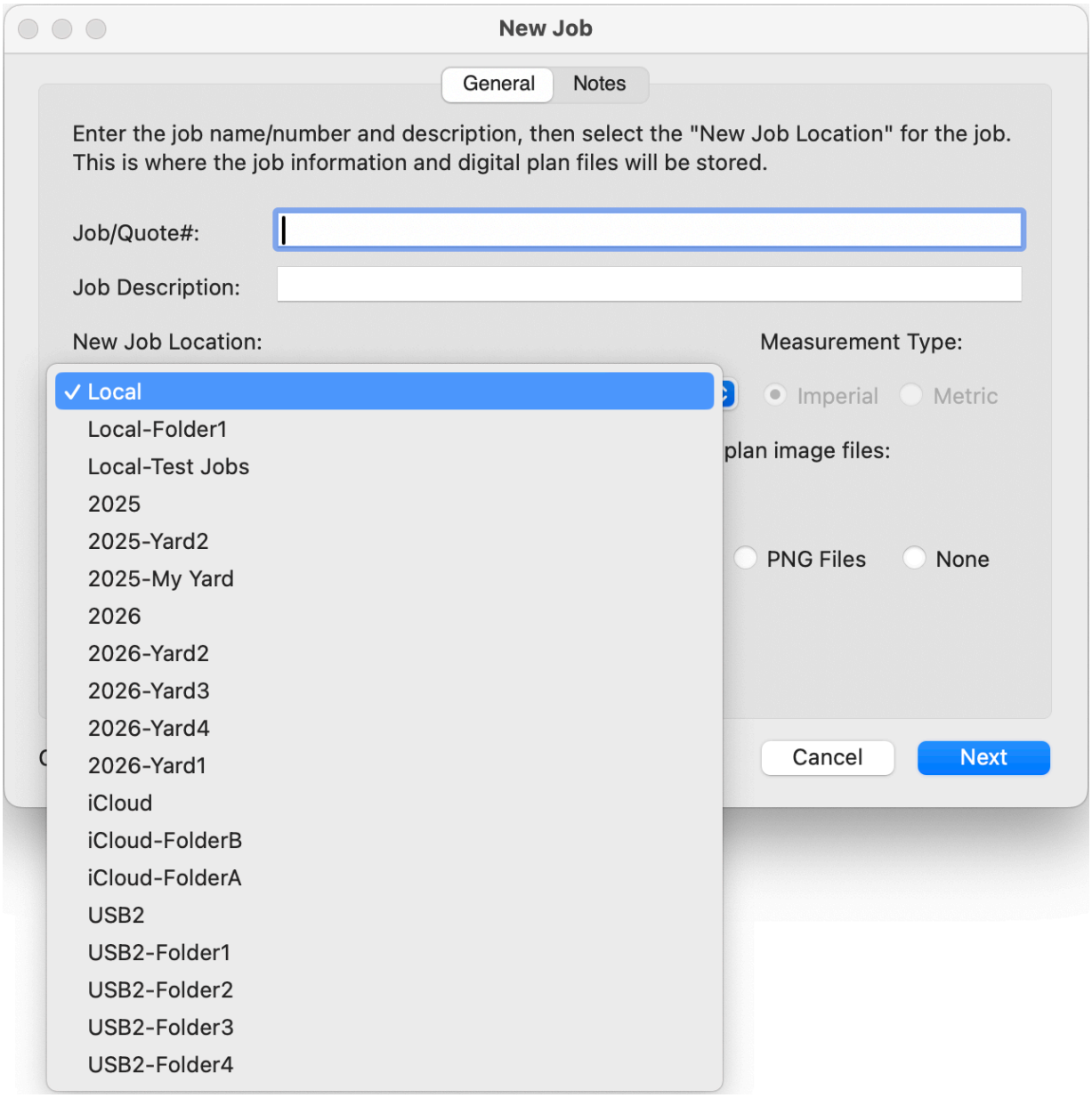
Folders can be added to a local storage device by selecting that device and clicking the **New Folder** button. In the example below, USB3 is a local USB drive on your computer that contains three folders named New York, Dallas and Chicago. There is also a job named Job20260814 that is not stored in a nested folder.



To rename an existing folder, double-click on the folder name or click the **Rename** button. Always use buttons in the Manage Jobs dialog to delete, move or copy jobs between local and shared storage locations. If Local Job Cache and Shared Job Cache is enabled, TradeTek will always keep cached data synchronized when using the Manage Job dialog.

Locally defined storage locations supplement the New Job Location options available in the New Job dialog. In this example, USB2 is currently available to this user and it

contains four folders named Folder1, Folder2, Folder3 and Folder4 that were created from the Manage Jobs dialog.



Summary

The Shared Job Cache is typically setup once by a team leader and automatically managed by TradeTek thereafter. Users at different locations can create, delete and update jobs or move jobs around with the Manage Job dialog. In general, TradeTek keeps everything synchronized in the cache while users are blistfully unaware of what others are doing. Users should never be sneaky and move jobs around outside of

TradeTek. To use the Shared Job Cache, a user requires Internet access and the Network or Cloud servers must be online.

If a new storage location is added in the Job Storage dialog, it is not automatically added to the Shared Job Cache. This is a relatively rare event and that location may contain old archived jobs that do not need to be included in the cache. Present the Shared Job Cache Setup dialog to add a new storage location to the cache.

If new folders are added to a storage location from the Manage Jobs dialog, those folders are automatically added to the Shared Job Cache if that storage location is already included in the cache. If a folder is deleted from a storage location with the Manage Jobs dialog, that folder is automatically removed from the cache.

The Shared Job Cache is refreshed in TradeTek memory when a user presents the Open Job or Manage Jobs dialogs. If the team leader at a different location makes changes to the cache they won't be seen by a user until the Open Job dialog is opened again. The Shared Job Cache boosts performance up to 100x when navigating through job folders with these dialogs.

The Local Job Cache does not require Internet access. It is configured by a local user and has no affect on other members of the team. It allows the New Job, Open Job and Manage Jobs dialogs in TradeTek to reflect the current job storage options available to that user which may include other local drives.

Job Cache makes it easier to locate and organize jobs based on properties within the job itself such as Customer, Estimator or Salesperson. Together, Shared Job Cache and Local Job Cache can maximize the efficiency of the team and each individual user.